

REMARKS

Claims 1-11 and 14-25 are pending in the present application. Claims 1, 9, 10, 14, 20, and 23 are independent claims. The Examiner is respectfully requested to reconsider the outstanding rejections in view of the following remarks.

Allowable Subject Matter

It is gratefully acknowledged that the Examiner allowed claims 9, 14, and 15, and indicated that claims 2-6, 16-19, 21, 22, 24, and 25 would be allowable if rewritten in independent form.

Substance of Interview (Telephonic) on February 1, 2006

A telephonic interview was conducted between Examiner Carol Tsai and Applicants' representative, Jason Rhodes (Reg. No. 47,305), on February 1, 2006. During this interview, Applicants' representative pointed out that the Office Action issued on December 22, 2005 did not acknowledge new claims 20-25 or the amendments to claims 9 and 14, which were filed in the Reply Under 37 CFR § 1.111 of November 2, 2005. The Examiner agreed that a replacement Office Action would be issued, which addresses these issues.

Acknowledgment of Information Disclosure Statement

Applicants point out that an Information Disclosure Statement (IDS) was filed on October 15, 2003, citing a patent document and a non-patent document. While the Office Action of December 13, 2004 acknowledged this IDS, the Examiner failed to initial the non-patent document (*IBM Technical Disclosure Bulletin*) in the corresponding PTO-1449. Applicants respectfully request the Examiner to consider this non-patent document, and send another initialed copy of the PTO-1449 to Applicants¹ indicating that the non-patent document has been considered.

¹ Since the Examiner did not cross-out the non-patent document in the PTO-1449, Applicants recommend that the Examiner simply initial the PTO-1449 on record, and send a copy of it to Applicants after considering the non-patent document.

Rejection Under 35 U.S.C. § 102

Claims 20 and 23 stand rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 4,843,309 to Kareem et al. (hereafter “Kareem”). This rejection is respectfully traversed.

Independent claims 20 and 23 recite combining versions of a signal, which are obtained by detecting two types of events: positive slope events (signal crosses predetermined level with positive slope), and negative slope events (signal crosses predetermined level with negative slope).

In page 2 of the Office Action, the Examiner asserts that Kareem teaches detecting both types of events, citing col. 3, lines 38-44. This passage has been reproduced below:

tem reset period. The triggering event occurs when the voltage amplitude of the analog signal crosses a preselected trigger voltage with a slope of a preselected polarity. It will be appreciated, however, that triggering events could alternatively be referenced to signals other than the analog signal being measured by oscilloscope 50.

As such, the cited passage of Kareem refers to a triggering event which occurs when the “signal crosses a preselected trigger voltage with a slope of *a preselected polarity*” (emphasis added). The only reasonable interpretation of this passage is that Kareem’s waveform acquisitions are triggered *either* by a positive slope *or* negative slope crossing.

Thus, assuming Kareem does in fact teach combining that the acquired waveforms, Applicants respectfully submit that Kareem would only combine waveforms triggered by a positive slope crossing, or combine waveforms triggered by a negative slope crossing. Thus, Kareem fails to disclose combining waveforms triggered by a positive slope crossing with waveforms triggered by a negative slope crossing.

Accordingly, Applicants respectfully submit that there is no teaching or suggestion in Kareem of combining waveforms obtained by detecting positive slope events with waveforms obtained by detecting negative slope events, as required by claims 20 and 23.

Applicants submit that claims 20 and 23 are allowable at least for this reason. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

Rejection Under 35 U.S.C. § 103

Claims 1, 7, 8, 10, and 11 stand rejected under 35 USC § 103(a) as being unpatentable over Kareem in view of U.S. Patent Publication No. 2004/0183531 to Robinson et al. (hereafter “Robinson”). This rejection is respectfully traversed.

In page 4 of the Office Action, the Examiner asserts that it “would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kareem et al.’s method to include the versions comprising overlapping parts of said signal, as taught by Robinson et al., in order that d[e]terministic components can be represented as a series of overlapping sinusoidal waveforms.”

Applicants disagree with the Examiner’s assertion. Initially, Applicants submit that Robinson does not disclose overlapping signal waveforms, as asserted by the Examiner. Instead, Robinson shows superimposed *probability density functions*. Each illustrated function represents the probability of a particular residence time (or crossing) time t. The different probability density functions relate to different conditions. In certain circumstances, these distributions may overlap, as indicated in paragraph 0037 of Kareem.

Furthermore, Applicants respectfully submit that the Examiner has failed to provide the requisite motivation or suggestion for combining Kareem and Robinson. See MPEP § 2143.01. First, the Examiner does not explain why it would be advantageous or desirable to modify Kareem so that “d[e]terministic components can be represented as a series of overlapping sinusoidal waveforms.” Furthermore, Robinson fails to disclose anything with respect to an oscilloscope arrangement, as described in Kareem, which further shows the lack of motivation to combine the two references.

However, assuming for the sake of argument that Kareem and Robinson could be combined, the resultant combination would differ from that contemplated by the Examiner. One reason is that no correlation between Robinson’s probability density functions (e.g., in Fig. 1) and the displayed signal waveform in Kareem’s oscilloscope. Also, modifying Kareem’s oscilloscope to combine

overlapping portions of a signal waveform, as proposed by the Examiner, would be contrary to the normal operation of oscilloscopes. "If [a] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See MPEP § 2143.01, citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Thus, Applicants respectfully submit that the § 103 rejection of claims 1, 7, 8, 10, and 11 is deficient at least for the reasons set forth above. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Examiner's Statement of Reasons for Allowable Subject Matter

The Examiner offers a statement as to why claims 9, 14, and 15 are allowable over the cited references, focusing on particular features of the claims. Although, Applicants agree that the references do not disclose or teach the features referred to by the Examiner², Applicants point out that it is the claims as a whole, including the various interrelationships and interconnections between the claimed elements, which are not taught or suggested by the cited references. Moreover, each claim should be separately considered as a whole, as being allowable over the prior art of record. Accordingly, Applicants emphasize that claims 9, 14, and 15 should be considered separately as a whole, taking into consideration the various interrelationships and interconnections between the various claimed elements, as being allowable.

Conclusion

Entry of this Request for Reconsideration is respectfully requested. In view of the above remarks, the Examiner is respectfully requested to reconsider the outstanding rejections and issue a Notice of Allowance in the present application.

Should the Examiner believe that any outstanding matters remain in the present application, the Examiner is respectfully requested to contact Jason W. Rhodes (Reg. No. 47,305) at the

² However, Applicants do not concede that Kareem teaches all of the elements asserted by the Examiner within these statements.

Application No. 10/609,375
Amendment dated May 8, 2006
After Final Office Action of February 6, 2006

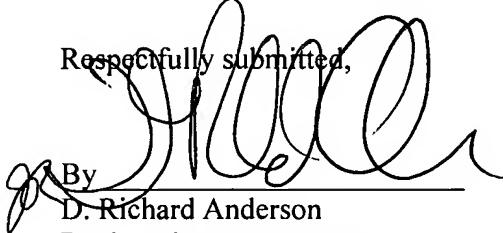
Docket No.: 1906-0116P

telephone number of the undersigned to discuss the present application in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,


By

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